

COMLINC

User Agreement



Winter 2012

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COMLINC Memorandum of Agreement

The Commonwealth's Link to Interoperable Communication ("COMLINC") clearly identifies a service delivery system as a radio communications interoperable solution between the Commonwealth's Statewide Agencies Radio System ("STARS") and public safety radio communications systems maintained and/or managed at the local level.

I. Parties

This Memorandum of Agreement ("MOA") constitutes an agreement between the Commonwealth Interoperability Coordinator representing the Office of Veterans Affairs and Homeland Security/the Virginia State Police and the City/County of _____, Virginia, (hereinafter referred to as the "Agency") setting forth the terms of agreement for cooperation with regard to operating policy, operational procedures, roll call, advisory group, technical and maintenance support, and training curriculum of the COMLINC throughout the Commonwealth of Virginia.

II. Purpose

The Purpose of this MOA is to establish cooperative and mutually beneficial use of public safety communications interoperability equipment installed or in use at the facility of the above-named Agency. Relationships among the participating state and local partners are vital to foster the success of COMLINC, the statewide radio communications interoperable solution. This MOA also sets forth the responsibilities of the partners as they relate to operational policies, operational procedures and maintenance, and technical support in Virginia at both the state and local levels.

To ensure maximum flexibility for all partners under this agreement, it is agreed that the partners may enter supplemental, agency-specific agreements that are in furtherance of and complimentary to this agreement. At a minimum, however, the partners agree to follow the aspects of this MOA at the state and local level and/or encourage representatives to enter into this agreement locally.

III. Definitions

Agreement

Shall mean this Memorandum of Agreement, and any and all amendments and/or appendices hereto

Associated System Assets

Shall mean system assets and equipment not designated as Fixed Network Equipment that are required for operation of the system, and shall include buildings, dispatch center furniture, fences, generators, grounding systems, HVAC systems, rights of way, roadways, site leases, towers, uninterruptible power supplies ("UPS") and the MOSCAD fire alerting equipment.

City

Shall mean a legal entity specifically identified herein, its successors and assigns.

Commonwealth Link to Interoperable Communications

Referred to as “COMLINC,” is defined as the hardware, software, and network that patches communications for increased interoperability.

Contract

Shall mean the Communication Systems Agreement, negotiated by the City and County for the operation, maintenance, and upgrades of the System, including all attachments thereto.

County

Shall mean a legal entity specifically identified herein, its successors and assigns.

Fixed Network Equipment

Shall mean the System equipment currently owned and to be purchased by the City and/or County and located at System sites. This equipment is the infrastructure necessary to facilitate the use of subscriber units on the 800 MHz Trunked Radio System, the Mobile Data Radio System, and other Radio Communications systems and shall include all equipment that is common to both City and County such as antenna network equipment, base stations, controllers, fault management network equipment, radio console equipment at all dispatch centers, microwave network equipment, and simulcast network equipment.

Subscriber Equipment

Shall mean the mobile and portable radios used by the City and/or County on the System.

System

Shall mean the radio communications system owned and/or operated by the local entity being a City and/or County or regional system.

IV. Authority

This MOA satisfies 47 CFR 90.179 and 47 CFR 90.421 of Federal Communications Commission (“FCC”) regulations, concerning the shared use of radio stations as a written agreement between the licensee and all Interoperability Network Participants. This MOA is authorized by Va. Code §§ 2.2-231.6 and -232.

V. Applicability

This MOA is applicable to the signatory jurisdictions otherwise authorized by 47 CFR 90.179(a) to use a FCC licensed radio system.

This MOA authorizes the use of designated frequencies made available by the Agency to include the Agency’s law enforcement, fire, EMS and communication centers and the local jurisdiction’s frequencies for the purpose of coordination between the emergency response agencies and resources. Such coordination may occur during interagency operations, en-route travel, incident-driven communications, scheduled testing of the interoperability equipment or training for these events as previously authorized.

VI. Vision of COMLINC

The vision of the COMLINC system in Virginia is to provide a reliable solution to enhance and/or permit interoperable radio communications between federal, state and local resources through an efficient system

capable of delivering a seamless and integrated means of radio communications. Additionally, the system should eliminate the obstacles to communicating between disparate radio systems; reduce costs; enhance participation; accommodate demand needs; coordinate technical requirements; and improve radio communications during public safety responses while ensuring a seamless operational system across disciplines.

VII. Provision of Services

I. System-wide Commitments:

Each partner to this MOA agrees to encourage commitments in coordination with this state-wide radio communications interoperability system. Each commitment is identified below in its respective Appendix, which is part of and included in this MOA. The commitments are as follows:

- **Appendix 1:** Operating Policy
- **Appendix 2:** Operational Procedures
- **Appendix 3:** Roll Call
- **Appendix 4:** Advisory Group
- **Appendix 5:** Technical and Maintenance Support
- **Appendix 6:** Training Curriculum

II. System-wide Benefits:

In addition to the numerous positive impacts derived from an effective, seamless radio communications interoperability system, each partner to this MOA stands to gain a wide array of benefits through their participation. These benefits include, but are not limited to:

- Promotion of statewide collaboration as articulated by the Statewide Interoperability Coordinator's Office
- Improved radio communication to promote interoperability
- Increased level of communication amongst federal, state and local public safety communication centers and first responders
- Increased participation at the local level
- Improved and defined approach to technical support and sustainment of the system
- Coordinated central support mechanism of the system
- Prevention of duplication of services, efforts and financial commitments
- Enhanced awareness of available services
- A developed curriculum for the consistent training and use of the system

VIII. Performance Goals

To continually improve the quality of the COMLINC system for the benefit of the individuals and agencies it serves, the partners to this MOA agree to cooperate and strive to achieve the following:

Goal #1	Eliminate unwarranted duplication of services, reduce costs, and enhance participation and performance of users served through the system.
Goal #2	Serve as an efficient nexus for interoperable radio communications between federal, state and local resources in the event of disparate systems or during emergency operations.
Goal #3	Ensure system users are provided with a training curriculum specific to the discipline.
Goal #4	Conduct regular and routine roll calls of the system to ensure operational readiness. Maintain familiarity with the system by interacting with the public safety communication centers staff, who serve as the primary gatekeepers and facilitators of the system.
Goal #5	Increase the ability of responders to effectively communicate when needed and, in particular, during disaster situations.
Goal #6	Provide a means to ensure the continuity of technical support and maintenance of the system.
Goal #7	Establish guidelines for maintaining a cooperative working relationship, facilitate joint planning, education and training of the system, and develop a sustainable approach to ensure system readiness.

IX. Responsibilities under the MOA

The Agency agrees to fulfill its responsibilities under this MOA in accordance with the provisions of law and regulations that govern its activities. If at any time the Agency is unable to perform its functions under this MOA, the Agency shall immediately provide written notice to the Virginia State Police (“VSP”) Communications Officer and COMLINC Advisory Group describing its inability to fulfill the requirements of this MOA and establishing a date to mutually resolve the issue, within thirty (30) days of providing the notice required above.

The COMLINC Advisory Group will meet at agreed-upon intervals to discuss and plan activities to satisfy the requirements of this MOA and ensure the efficient and effective implementation of this MOA. The COMLINC Advisory Group is described in Appendix 4.

X. Modification/Termination of the MOA

This Agreement will be in effect upon the date of the last signature and shall remain in effect for as long as the Agency is actively using the equipment, and participating in exercises, roll calls, and trainings with the equipment.

The Agency may terminate this Agreement in accordance with this section. In the event the Agency desires to withdraw its participation and/or withdraw a resource from the Interoperability Network, it must send written notice sixty (60) days in advance to the VSP Communications Officer and COMLINC Advisory Group. The Agreement shall continue unaffected for the remainder of the participating agencies.

Upon termination of this MOA, the Agency will not transfer, rent, sell, lease, alienate, donate, mortgage, encumber, or otherwise dispose of any Commonwealth-provided equipment without the prior written consent of the VSP Communications Officer and the COMLINC Advisory Group. The COMLINC Advisory Group will rely on a complete COMLINC user list provided by VSP to notify all users of the Agency’s withdrawal from this MOA.

In the event this Agreement is terminated, each party shall be solely responsible for the payment of any expenses it has incurred.

Equipment provided by the Commonwealth of Virginia directly to an Agency through a separate use agreement will be removed from the Agency by the VSP Communications Division for beneficial use elsewhere in the Commonwealth. If the Agency received the equipment through a direct purchase, individual grant award or local or regional grant award, the Agency is encouraged, but not required to transfer ownership of any or all COMLINC-related equipment to VSP Communications Division for beneficial use elsewhere in the Commonwealth.

This MOA is a statement of the intentions of the signatory parties to coordinate their efforts. It is not a contract; it is not enforceable in any judicial or administrative forum; and it does not create any rights or duties of any third party. This MOA does not modify any statutory duties of a party.

XI. Signatories

Signature

Date

Title

Agency Name and Address

Chris McIntosh

Date

Commonwealth Interoperability Coordinator

Col. W. Steven Flaherty

Date

Superintendent Virginia State Police

Appendix 1: COMLINC Operating Policy

1.1 PURPOSE

- 1.1.1 Provide general operating policies that agencies and end-users should adhere to for the effective implementation and use of the Statewide COMLINC Agreement.

1.2 POLICY

- 1.2.1 All users are responsible for ensuring that the Interoperability Network is used only by authorized persons and only for purposes consistent with the requirements of 47 CFR Part 90 (Federal Communications Commission rules and regulations).
- 1.2.2 Any locality interoperability connections with STARS are subject to the control of VSP Dispatch.
- 1.2.3 Interoperability connections are subject to the availability of resources as determined by the locality and/or the VSP Communications Division Commander.
- 1.2.4 Conference or patch connections should only be terminated by the initiating agency except in the event of a technical interference problem or if the patch negatively impacts an agency's operation. In these situations any agency involved in the patch may break their own connection to the patch.
- 1.2.5 The user agrees to participate in all pre-coordinated training exercises as mutually arranged to maintain the proficiency of network operations personnel, subject to the availability of resources.
- 1.2.6 Requests for Mutual Aid Response will be handled by current established policy. The appropriate channel/talkgroup incident for the operation will be relayed to the user with the mutual aid request.
- 1.2.7 Use of the interoperability equipment in response to mutual aid incidents within a user's response area is at the discretion of the appropriate authority designated by and for the participating agency.
- 1.2.8 COMLINC channels/talkgroups will be utilized for communications between jurisdictions during a major disaster, a situation requiring resource sharing, and/or emergency managing. It will be incumbent upon the controlling jurisdiction to assess and determine if the situation or event requires utilization of any additional channels/talkgroups.
- 1.2.9 There are no written or implied guaranties for the use of the user's Land Mobile Radio, Microwave Radio, and Voice over Internet Protocol (VoIP) interoperability networks. Such use is subject to the availability of system resources among the users.
- 1.2.10 If a disaster occurs in one jurisdiction that begins to overload that locality's system, COMLINC or STARS communications centers should re-coordinate the use of all applicable channels or talkgroups authorized by the VSP Communications Division Commander in order to mitigate the

situation. The communications centers will establish and coordinate a communications plan to be utilized for the duration of the disaster.

- 1.2.11 All parties agree to provide access to and/or records of communications in compliance with the Virginia Freedom of Information Act (FOIA), Va. Code §§ 2.2-3700 et seq. Procedures for the handling of FOIA requests, a subpoena duces tecum, or other means shall comply with the agency with which ownership is identified herein. Records shall be released accordingly by the agency with ownership of the incident and all agencies shall be notified of the request and any subsequent release of voice recordings. Because some COMLINC capabilities are redundantly captured, it is understood that the initiating and/or originating agency retains ownership of any and all recordings of the same incident. The initiating and/or originating agency shall be defined as the locality in which the incident occurred.

Example: An incident occurs in Spotsylvania County, which results in coordination through the COMLINC with the VSP, the City of Fredericksburg, the Virginia Department of Emergency Management (VDEM), and Stafford County. As the originating incident occurred in Spotsylvania, they retain ownership of any and all recordings resulting from use of the COMLINC system. An agency that has a secondary event resulting from the primary event will have ownership access to recordings as it relates to the secondary event (e.g., a pursuit results in a crash which results in additional charges in a secondary locality).

Appendix 2: COMLINC Operational Procedures

2.1 PURPOSE

- 2.1.1 This document establishes the COMLINC Network's operational procedures during inter-jurisdictional responses. These procedures are effective guidelines for interoperable communication and allow users the choice to participate in COMLINC during inter-jurisdictional responses.

2.2 INITIATING PROCEDURES

- 2.2.1 When it becomes apparent that interagency coordination will be needed, the initiating agency shall contact the assisting agency by:
- 2.2.1.1 Telephone
 - 2.2.1.2 COMLINC Conference call.
 - 2.2.1.3 Any other means possible.
- 2.2.2 The initiating agency shall provide all pertinent information to the assisting agencies. This information will be provided to the appropriate units prior to being switched over to the appropriate talkgroup or channel. An announcement will be made on the appropriate channels before the patch is initiated to inform the involved units.
- 2.2.3 The initiating agency will patch to the appropriate COMLINC talkgroup to the operational channel or talkgroup for interoperability communication between participating agencies in the incident.
- 2.2.4 When an incident enters another jurisdiction, that jurisdiction assumes radio operational control of the incident.
- 2.2.5 As a user leaves the incident, that user will notify the controlling agency before leaving the incident and returning to their home system. (For user safety and accountability, the user must communicate their status to the controlling agency).
- 2.2.6 The controlling agency may consider releasing the "patch" when the incident has ended. Prior to the patch being disconnected communication personnel will make an announcement that the patch is being discontinued and to switch to their appropriate radio channel or talkgroup.

2.3 COMLINC OPERATIONS

- 2.3.1 COMLINC will be considered in the following circumstances: Mutual Aid, Emergency Management Assistance Compact (EMAC), Specialty Team Response, Disaster Response, etc.
- 2.3.1.1 Mutual Aid users will use common language protocols.

Example: Chesterfield unit 112, State Unit 1504, Henrico 400, etc.
 - 2.3.1.2 Once the incident is completed, the unit will advise the COMLINC controlling authority that they are returning to their home jurisdiction.

- 2.3.2 Any jurisdiction may obtain the use of a STARS interoperability talkgroup through VSP Dispatch. It will be incumbent upon the initiating jurisdiction to secure the necessary personnel to monitor and operate the talkgroups being utilized. Resources assigned specific operations will be guided to the appropriate channels/talkgroups by their communications center when dispatched.

Appendix 3: COMLINC Roll Call

3.1 PURPOSE

- 3.1.1 To establish communication procedures for Public Safety Agencies to utilize during roll call. To provide the most effective communication guidelines for each Public Safety Agency when communicating through COMLINC for roll call.

3.2 PROCEDURE

3.2.1 DAILY “ROLL CALL”

- 3.2.1.1 COMLINC agencies should participate in roll call once per shift.
- 3.2.1.2 Specific procedures for roll call vary among the regions. Agencies should follow the appropriate procedures outlined by each regional user group.

Example Roll Call for Region Consideration:

- 3.2.1.3 One agency could initiate Roll Call for one month. Set up a calendar to rotate the initiation roles (could be subject to change based on work load and availability of staffing).
- 3.2.1.4 Roll call will be conducted once per day at minimum, and once per shift at maximum.
- 3.2.1.5 The conference call patch interface from call center to call center will be tested for success and a radio patch involving one field unit from each participating agency will be tested for success.
- 3.2.1.6 Any problems transmitting or receiving during roll call should be reported to the Network Operations Center (NOC).

3.2.2 CONSTRAINTS

- 3.2.2.1 Any locality interoperability connections with STARS are subject to the operational guidelines of the STARS systems.
- 3.2.2.2 Interoperability connections are subject to the availability of resources as determined by each participating agency.

Appendix 4: COMLINC Advisory Group

4.1 PURPOSE

- 4.1.1 The COMLINC Advisory Group exists to address the COMLINC challenges that users face. The COMLINC Advisory Group is the established management body for COMLINC planning and implementation.
- 4.1.2 The Commonwealth of Virginia is committed to COMLINC as one mechanism for increasing interoperable communications. The statewide COMLINC system will soon be deployed in jurisdictions across the Commonwealth. Due to the statewide nature of the COMLINC system, users will be universally affected by changes. As such, collaborative, user-driven decision-making shall be coordinated through the COMLINC Advisory Group.

4.2 STRUCTURE

4.2.1 MEMBERSHIP

- 4.2.1.1 The COMLINC Advisory Group comprises one voting member and one alternate from each Regional Preparedness Advisory Committee for Interoperability (RPAC-I), plus one voting member and one alternate from the VSP, adding up to eight members and eight alternates in total. Each RPAC-I will be allotted one voting membership on the COMLINC Advisory Group; the alternate will act as the voting member if the RPAC-I member is not present. Each RPAC-I member and alternate will be nominated by their RPAC-I. (It is recommended that the member and alternate are COMLINC users.) The VSP representing member and alternate will be designated by VSP. (VSP will also be responsible for all technical and maintenance support of COMLINC software, see *Appendix 5: Technical and Maintenance Support* for more information.)

4.2.2 CHAIRMANSHIP RESPONSIBILITIES

- 4.2.2.1 A COMLINC Advisory Group Chair will be elected by the members to a two-year term every even year, with a limit of two consecutive terms. It will be the responsibility of the Chair to act as the coordinating point of contact for the meetings (e.g., sending invites and maintaining a roster) and to ensure any action items from the meetings are held to deadline.

4.2.3 MEETING FREQUENCY

- 4.2.3.1 Members will meet once a year at the Association of Public-Safety Communications Officials (APCO) Virginia Public Safety Communications Fall Conference. Subsequent meetings will be on an as-needed basis. Although voting membership is limited to RPAC-I and VSP representatives, the COMLINC Advisory Group meetings will be made open to all users.

4.2.3.2 Meetings will need to follow all Virginia Open Meetings guidelines and all notes produced will be subject to FOIA unless a specific item of discussion is properly excluded under FOIA.

4.2.4 DECISION-MAKING PROCESS & MANAGEMENT FLOW

4.2.4.1 The COMLINC Advisory Group will make planning and implementation recommendations to the Statewide Interoperability Executive Committee to consider in consultation the Virginia Statewide Interoperability Coordinator, as depicted in Figure 1.

COMLINC Advisory Group Management Flow:

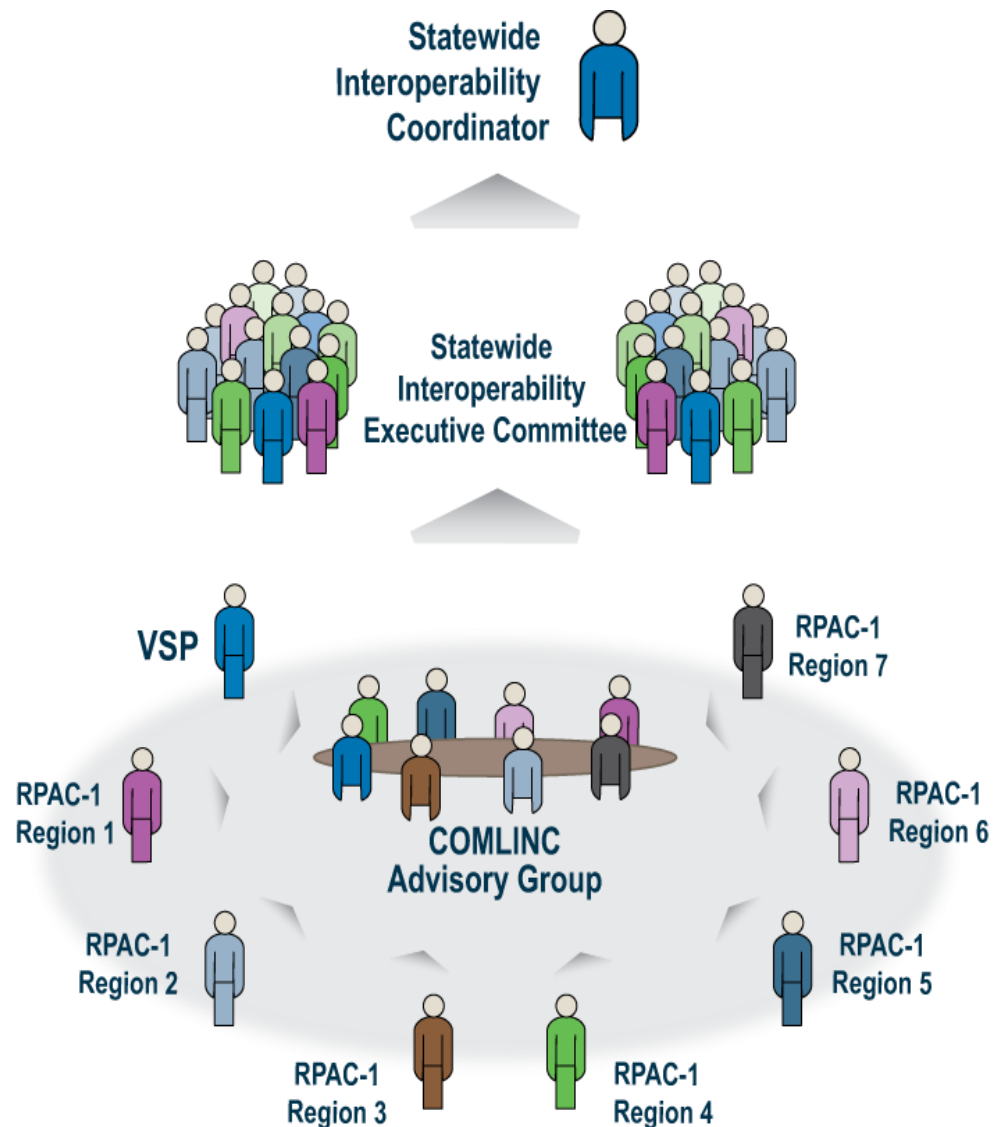


Figure 1. COMLINC Advisory Group Management Flow

- 4.2.4.2 If an issue of resolution must be put to a vote for a decision, the majority will rule, and the Statewide Interoperability Coordinator will serve as the tie-breaking vote. COMLINC Advisory Group decisions that affect the Statewide COMLINC Agreement and its appendices will be changed after a 30-day approval period for the Statewide Interoperability Executive Committee and Statewide Interoperability Coordinator. Decisions that affect funding arrangements will be passed to the Statewide Interoperability Coordinator and the Statewide Interoperability Executive Committee as recommendations for consideration.

4.3 COMLINC ADVISORY GROUP: OPERATING PRINCIPLES

- 4.3.1 The COMLINC Advisory Group will govern the Statewide COMLINC Agreement using the following operating principles:
 - 4.3.1.1 Consider the unique needs of each user and region, and recognize and respect these needs to work together to increase interoperable communications.
 - 4.3.1.2 Maintain an interdisciplinary focus and recognize the needs of the personnel who use COMLINC to protect and serve the public
 - 4.3.1.3 Reach out and engage subject matter experts.
 - 4.3.1.4 Speak with one voice when reporting externally.
 - 4.3.1.5 Ensure a collaborative approach when dealing with issues where all COMLINC interests are represented.
 - 4.3.1.6 Consider future communications solutions.

Appendix 5: Technical & Maintenance Support Standards

5.1 PURPOSE

- 5.1.1 The VSP Communications Division is responsible for and maintains authority over technical support for the COMLINC Network. To ensure that all COMLINC equipment and systems are available and sustained with consistency, each state, local, and federal user within the COMLINC Network agrees to adhere to these standards.
- 5.1.2 These standards may be changed, revised or upgraded as technology and operational requirements dictate. Changes or revisions to this document shall be reviewed for comment by the COMLINC Advisory Group. The Advisory Group has a 30-day review and comment period. The VSP Communications Officer and the State Interoperability Executive Committee (SIEC), working in consultation with the Statewide Interoperability Coordinator, will also have a 30-day period to provide final approval and acceptance of revisions.

5.2 APPLICATION AND SCOPE

- 5.2.1 This standard applies to all state, local, and federal users that participate in the COMLINC Network or other non-government agencies and organizations if approved for access to the system.
- 5.2.2 VSP WILL PROVIDE THE FOLLOWING SERVICES
 - 5.2.2.1 First-tier maintenance, repair, and technical support.
 - 5.2.2.2 All labor and materials associated with maintenance and repair.
 - 5.2.2.3 Maintenance support is limited to primary COMLINC equipment and supporting software located at a central dispatch center (PSAP) and/or deployable COMLINC equipment that has been installed on mobile command units or cache radio systems.
 - 5.2.2.4 Life cycle replacement of the hardware and software when funded for special projects and upgrades to the system.
 - 5.2.2.5 Trouble ticket administration via the STARS NOC.
 - 5.2.2.6 Asset, configuration, and change management for the network and fixed facility COMLINC equipment.
 - 5.2.2.7 Security services for the network.
 - 5.2.2.8 Upgrading of hardware and software when funded for special projects and upgrades to the system.
 - 5.2.2.9 Adds, moves, changes resulting from PSAP re-location and removal of equipment upon termination of MOA.
 - 5.2.2.10 Audio baseline of gateway installations.
 - 5.2.2.11 Public safety grade interconnections via the STARS Network where feasible.

5.2.3 VSP IS NOT RESPONSIBLE FOR THE FOLLOWING USER EQUIPMENT OR SERVICES

- 5.2.3.1 User Internet Services (ISP) for network access. The demark is the COMLINC router WAN port.
- 5.2.3.2 Connections to the radio/console. The demark is the mutually agreed to punch block or console port for direct connection to a radio.
- 5.2.3.3 User owned and operated Mobile Data Terminals, smartphones or other devices using COMLINC software that was not part of the original equipment installation and deployment. VSP will provide technical support for the COMLINC software only.
- 5.2.3.4 Maintenance or technical support of COMLINC hardware/software that has been added to or installed on user equipment such as Mobile Data Terminals (MDT), Smart Phones or other user-owned equipment in which other uses are employed
- 5.2.3.5 Faults traced to the user demark should be documented in the STARS NOC trouble ticket for tracking and resolution with the user. The user is responsible for providing VSP with support from their respective Radio Shop and/or IT department in order to resolve issues between the COMLINC Network and the User's infrastructure

5.3 MAINTENANCE STRUCTURE

5.3.1 MAINTENANCE WILL BE PROVIDED IN TWO TIERS

5.3.1.1 TIER-1

- 5.3.1.1.1 The first-tier response for any initial trouble calls will be the responsibility of VSP and will include:
- 5.3.1.1.2 Fault isolation to the demark identified above
- 5.3.1.1.3 Reconfiguration of clients and/or servers to clear faults
- 5.3.1.1.4 Removal and replacement of faulty equipment
- 5.3.1.1.5 Cable and connector repair/replacement (COMLINC Equipment Only)
- 5.3.1.1.6 Network and access security
- 5.3.1.1.7 COMLINC router configuration

5.3.1.2 TIER-2

- 5.3.1.2.1 The Original Equipment Manufacturer (OEM)/supplier of COMLINC equipment is responsible for the second-tier response, and will provide VSP with the following services:
- 5.3.1.2.2 Technical support and escalation of issues beyond the scope of VSP
- 5.3.1.2.3 Maintenance and repair of proprietary equipment and software
- 5.3.1.2.4 Technical training

5.4 TROUBLE REPORTING

5.4.1 All COMLINC users are responsible for contacting the STARS NOC to initiate a trouble ticket for corrective action and/or maintenance support. When calling in a trouble ticket, provide the following information:

5.4.1.1 Locality/Agency name and contact information

5.4.1.2 Address/Location of faulty equipment

5.4.1.3 Detailed description of problem and symptoms

5.4.2 TROUBLE TICKET SEVERITY LEVELS

1	<i>Critical</i>	Requires a two-hour response
2	<i>Urgent</i>	Requires a four-hour response
3	<i>Major</i>	Next day or next business day response
4	<i>Informational</i>	Statistics or fact gathering

5.4.3 All COMLINC trouble tickets will be assigned a severity level of 3 (next business day), unless the call is a result of a planned or active major event requiring immediate support. If this is the case, then a severity level of 1 (requiring a two-hour response) will be assigned to categorize the event as a multi-jurisdictional public safety event involving the immediate threat to life and property.

5.4.4 Depending on the nature of problem, responses to trouble tickets will be by initial phone contact, online support, or personal visit by a technician. Problems that can be resolved via phone or online technical support will not require a site visit by a VSP technician or OEM representative. Every effort will be made to try and resolve those issues by phone or online support where feasible.

5.4.5 The STARS NOC Contact Information

Telephone:	(804) 674-8017
	(804) 674-8018
	(866) 813-3550
E-mail:	noc01@vsp.virginia.gov
Mobile Data via laptops at NOC1 (STARS users only):	Badge NOC1

5.5 ESCALATION POLICY

5.5.1 COMLINC users may request an escalation by placing a request to the STARS NOC via the contact information listed above. The NOC will escalate the trouble by contacting the appropriate manager in the following order:

- 5.5.1.1 VSP COMLINC Interoperability Engineer
- 3.5.1.1 VSP Telecommunications Engineer Supervisor
- 3.5.1.2 VSP Assistant Communications Division Commander
- 3.5.1.3 VSP Communications Officer

5.6 CONFIGURATION MANAGEMENT AND CHANGE CONTROL

- 5.6.1 VSP will have responsibility for configuration and change management of fixed facility COMLINC systems. COMLINC is a Voice over IP (VoIP) radio gateway interoperability tool to be used for interoperability applications and other applications such as GPS tracking and video once these applications are included as a part of the approved COMLINC software configuration and functionality.
- 5.6.2 Users are not to use the system for other purposes or add/delete software to the COMLINC clients/servers.
- 5.6.3 All COMLINC fixed facility systems will include and be limited to the following:
 - 5.6.3.1 Windows Operating System and associated functions
 - 5.6.3.2 Maintenance support software
 - 5.6.3.3 Anti-virus/anti-spyware software
 - 5.6.3.4 COMLINC software and associated configuration files
 - 5.6.3.5 Other software required for the proper operation, security and support of the COMLINC system
- 5.6.4 VSP and the supplier of the equipment/software will manage any changes or updates to the COMLINC Network and associated hardware/software. To make a change a user must send a change request to the VSP Communications Officer for review.
- 5.6.5 Change requests must be made in writing to the VSP Communications Officer and shall at a minimum contain the following information:
 - 5.6.5.1 Detailed description of the change being requested
 - 5.6.5.2 Reason and justification for change
 - 5.6.5.3 Supporting technical and/or operational requirements that created the need for a change request
- 5.6.6 A user request for changes that involve the addition of assets, equipment, licensing, etc., will be submitted to VSP for engineering review, cost analysis, and approval and coordination of work with the supplier and requesting agency. Significant changes shall be reviewed and approved by the COMLINC Advisory Group, VSP Communications Officer, and the SIEC in coordination with the Statewide Interoperability Coordinator.

5.7 USER RIGHTS AND ADMINISTRATIVE FUNCTIONS

- 5.7.1 VSP and the supplier shall maintain full administrative rights and access to the COMLINC Network and associated equipment for the purposes of technical support, hardware and software configuration, change management, asset configuration, security, and maintenance. At no time will VSP utilize these rights except for the purposes listed above.
- 5.7.2 Users shall have the ability to set-up and locally configure their respective users. At no time will a locality be provided with the ability to perform global changes to sites other than their own. Agencies will not make configuration or equipment changes.

5.8 GLOSSARY

Agency Equipment	Hardware that was not procured, installed, and configured as part of the originally approved COMLINC system. Agency equipment includes dispatch equipment, radio infrastructure, mobile data terminals, mobile command post, etc.
Demarcation Point (Demark)	The point where an agency's technical support responsibilities end and the responsibility lies with the VSP or other entity as appropriate. Examples include: punch-blocks between COMLINC equipment and locality radio/console connections and the Internet connection point on the router
EMAC	Emergency Management Assistance Compact, the first national disaster-relief compact; Code of Virginia § 44-146.28:1.
FCC	Federal Communications Commission, the United States governmental agency responsible for regulating wire and radio communications
Fixed Facility	Permanent COMLINC installation, such as a Public Safety Answering Point or other non-deployable location
GPS	Global Positioning System, satellite navigation system that provides location and time information
ISP	Internet Services Provider, a company that provides access to the Internet
LMR	Land Mobile Radio, wireless communications devices intended for use by terrestrial users in the field
MDT	Mobile Data Terminal, a computerized device used in vehicles to communicate with dispatch
Mutual Aid	An agreement among emergency responders to lend assistance across jurisdictional boundaries
NOC	Virginia State Police Network Operations Center located at Virginia State Police headquarters in Richmond, Virginia
OEM	Original Equipment Manufacturer, manufacture of products or components that are purchased by a company and retailed under the purchasing company's brand name
Patch	Function that enables disparate systems to communicate with each other
PSAP	Public Safety Access Point (i.e. 911 Call Center, dispatch center)
SIEC	Statewide Interoperability Executive Committee, formally established with Executive Directive 7 (2007) to make recommendations to the Virginia Statewide Interoperability Coordinator concerning interoperable communications
STARS	Statewide Agencies Radio System, IP network operated by the Virginia State Police

Supplier	The OEM or other organization providing through procurement processes the original equipment, software and/or technical support with VSP for COMLINC
Talkgroup	Term for assigned channels on a trunked radio system
VOIP	Voice over Internet Protocol, transmission techniques for voice communications over an Internet Protocol network
WAN	Wide area network, a telecommunications network that covers a broad geographical area

5.9 MINIMUM EQUIPMENT SPECIFICATIONS

	RIOS 3.14.8 Minimums	RIOS 3.18.x (with Video Support)
OS Supported	Win XP, Win 7 32 bit only	Win XP, Vista, Win 7 (32 and 64 bit)
Central Processing Unit	Intel Core 2 Duo, Pentium D (Dual Core), Pentium 4 or Celeron	Intel Core i3
Socket	LGA 775	LGA1155
Speeds	1.80GHz and up	2.0GHz and up
Level 2 Cache		
Pentium D	2x 1024Kbyte, one L2 cache for each core	
Hyper-Threading	Pentium 4 only	
Chipset	Intel 945G	Intel P67 Express
Front Side Bus Speed	1066/ 800/ 533MHz	
System Memory		
FSB/ Configuration	1066/ DDR2-667	
	800/ DDR2-533 or DDR2-400	
	533/ DDR2-400	
Minimum Size	512Mbytes to allow for integrated Intel video	2GB
Maximum Size	4Gbytes, 4x 1024Mbyte DDR/DDR2 DIMMS	8GB
Width	128-bit: 2 channels (64 data bits)	
Local Graphics	Integrated Intel Graphics Media Accelerator 950	
Graphics Memory	Shared with system memory using Intel Dynamic Video Memory Technology (DVMT) 3.0	Recommend 512 dedicated memory
Vertical Refresh Rate	2048x 1536x 32 bits/ pixels at max 75Hz	
Graphics API Support	DirectX 9.0 and OpenGL 1.4	
Advanced Displays	Wide-screen (16:9 or 16:10 aspect ratio) High Definition Television	
Input/ Output (I/O) ports		
Serial/ Assignment	COM (DB-9) on front panel	N/A
Universal Serial Bus (USB)	Version 2.0	
Ports	Two dual stack (4 USB ports)	Min 4 ports depending on configuration

Ethernet port (standard)	Intel PRO 10/100/1000BASE-TX withRJ-45	
Ethernet port (2nd optional)	1000BASE-T only	
Ethernet port (3^rd optional)	1000BASE-T only	
PS/2 Keyboard and Mouse	1 x miniDIN- 6 each	

Appendix 6: COMLINC User Agreement Training Curriculum

6.1 PURPOSE

- 6.1.1. To equip all COMLINC users with the necessary skills and understanding for effectively utilizing the COMLINC systems and navigating the available support mechanisms.

6.2 INTENDED OUTCOME

- 6.2.1. Full understanding of COMLINC Operating Policy, Procedures, Governance, and Technical Maintenance and Support
-

6.3 UNIT 1- COMLINC OPERATING POLICY

6.3.1 Unit 1 Purpose:

- 6.3.1.1. To provide an overview of the basic purpose and uses of COMLINC and review the operating policies explaining the role and need for each.

6.3.2 Unit 1 Objectives:

- 6.3.1.2. Basic understanding of COMLINC and its uses.
- 6.3.1.3. Knowledge of each operating policy, its need, and how to access for future reference.
- 6.3.1.4. Provide real-world context to for the use of COMLINC operating policies.

6.3.2. Unit 1 Topics:

- 6.3.2.1. What is COMLINC?
- 6.3.2.2. COMLINC Concept
- 6.3.2.3. Overview of COMLINC Operating Policies

6.4 UNIT 2- SYTECH RIOS TRAINING

6.4.1 Unit 2 Purpose:

- 6.4.1.1 To ensure users understand how to use the RIOS system.

6.4.2 Unit 3 Objectives:

- 6.4.2.1 The user will possess the knowledge of the basic functionalities of the SyTech RIOS system.
- 6.4.2.2 The user will be able to perform all advanced functionalities of the SyTech RIOS System.

6.4.3 Unit 4 Topics:

- 6.4.3.1 SyTech RIOS Training: The How-to
- 6.4.3.2 Advanced SyTech RIOS Training: The How-to

6.5 UNIT 3-COMLINC OPERATING PROCEDURE

6.5.1 Unit 3 Purpose:

- 6.5.1.1 To provide an overview of operating procedures and explain the guidelines for interoperable communications that allow each user to effectively utilize the COMLINC system during incidents that require an inter-jurisdictional response.

6.5.2 Unit 3 Objectives:

- 6.5.2.1 Explain why operating procedures are needed.
- 6.5.2.2 Explain the process for initiating and deactivating a COMLINC patch.
- 6.5.2.3 Identify common operating guidelines for COMLINC use.
- 6.5.2.4 Describe the process for conducting roll call.

6.5.3 Unit 3 Topics:

- 6.5.3.1 Operating Procedures
- 6.5.3.2 Initiation/Deactivation of a COMLINC Patch
- 6.5.3.3 COMLINC Operation
- 6.5.3.4 Daily Roll Call

6.6 UNIT 4- COMLINC GOVERNANCE

6.6.1 Unit 4 Purpose:

- 6.6.1.1 To provide an overview of the systems and relationships established to enable sound decision-making for COMLINC

6.6.2 Unit 4 Objectives:

- 6.6.2.1 Identify role of COMLINC Advisory Group
- 6.6.2.2 Gained understanding of COMLINC Advisory Group's function

6.6.3 Unit 4 Topics:

- 6.6.3.1 COMLINC Governance
- 6.6.3.2 Advisory Group Principles

6.7 UNIT 5- COMLINC TECHNICAL AND MAINTENANCE SUPPORT

6.7.1 Unit 5 Purpose:

6.7.1.1 To provide an overview of the technical and maintenance support offered by VSP for COMLINC equipment, and to ensure users understand what support is available and how to access it.

6.7.2 Unit 5 Objectives:

6.7.2.1 An understanding of the types of technical maintenance and support offered by VSP.

6.7.2.2 A sense of the trouble reporting procedures and how to access them.

6.7.2.3 An appreciation of user rights and administrative functions of VSP.

6.7.3 Unit 5 Topics:

6.7.3.1 Technical and Maintenance Support Overview

6.7.3.2 Trouble Reporting Procedures

6.7.3.3 Maintenance Authorities